

ABDOMEN

PATHOLOGY

1.) Abdominal Aortic Aneurysm

- Localized dilatation of the abdominal aorta

2.) Biliary Stenosis

- Narrowing of the bile ducts

3.) Bowel Obstruction

- Blockage of the bowel lumen

4.) Cholecystitis

- Acute/chronic inflammation of the gall bladder

5.) Choledocholithiasis

- Calculus in the common bile duct

6.) Cholelithiasis

- Presence of gallstones

7.) Ileus

- Failure of bowel peristalsis

8.) Pancreatitis

- Acute/chronic inflammation of the pancreas

9.) Pancreatic Pseudocyst

- Collection of debris, fluid, pancreatic enzymes & blood as a complication of acute pancreatitis

10.) Pneumoperitoneum

- Presence of air in the peritoneal cavity

RADIOGRAPHIC PROJECTION

1.) Supine AP Projection (KUB)

- It includes kidney, ureter & bladder

2.) Upright AP Projection (Flat)

3.) Three-way/Acute Abdominal Series

- AP supine (KUB), AP upright & PA chest
- **Purpose:** To rule out free air, bowel obstruction & infections
- **PA Chest:** to detect free air that may accumulate under the diaphragm

4.) Left Lateral Decubitus

- If patient cannot stand for AP upright

5.) Dorsal Decubitus

- If the patient cannot assumed lateral decubitus

A.) ABDOMEN

AP PROJECTION

PP:

- **Supine:** arms over chest area; place support under knees (to relieve strain); center IR at level of iliac crest; pubic symphysis included
- **Upright:** arms at the sides; weight equally distributed on both feet; center IR 2 in. superior to iliac crest or level of iliac crest (bladder included)

RP: Level of iliac crest (supine); 2 in. superior to iliac crest (upright)

CR: \perp (supine); horizontal (upright)

SS:

- Size & shape of liver
- Spleen & kidneys
- Intraabdominal calcifications
- Evidence of tumor masses

PA Projection:

- Performed when the kidneys are not of primary interest
- **Rationale:** greatly reduces patient gonadal dose

Miller Recommendation:

- Patient kept in left lateral position for 10-20 minutes or 5 minutes before taking radiograph
- **Rationale:**
 - It allow gas to rise into the area under the right hemidiaphragm
 - To demonstrate small amounts of intraperitoneal gas in acute abdominal cases (10-20 mins)
 - To demonstrate larger amounts free air (5 mins)

ABDOMEN

LATERAL PROJECTION

R or L Position

PP: Lateral recumbent; knees flexed; elbows flexed; hands under head;

RP: Level of iliac crest; 2 in. superior to iliac crest (diaphragm included)

CR: \perp

SS:

- Prevertebral space (occupied by abdominal aorta)
- Intraabdominal calcifications
- Tumor masses

LATERAL PROJECTION

R or L Dorsal Decubitus Position

PP: Supine; arms across upper chest & behind the head; knees flexed

RP: 2 in. superior to iliac crest

CR: Horizontal

SS: Prevertebral space

ER: To determine the air-fluid levels in the abdomen

BARIUM-FILLED GI TRACT

- **Purpose:**
 - To demonstrate origin & extend of fistulae (abnormal passages b/n two internal organs)
 - To demonstrate sinus (abnormal channels leading to abscesses)
- **Barium Enema:** fistulae involving the colon
- **Barium Swallow (thin):** fistulae involving the small bowel
- **Bladder-filled w/ iodinated contrast media:** fistulae involving the bladder
- **Iodinated contrast media introduced through small diameter catheter:** for cutaneous fistulas & sinus tracts

☺ THE END ☺

“BOARD EXAM is a matter of PREPARATION. If you FAIL to prepare, you PREPARE to fail”

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